Reply to Office Action of February 10, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for managing a socket in a mobile communication system, comprising:

allocating a socket corresponding to a call control processor (CCP) in each one of a plurality of target processors;

communicating, via a first protocol, with each one of the plurality of target processors using the allocated socket; and

releasing the socket allocated to a selected target processor based on a reception state of a status message,

wherein releasing the allocated socket comprises:

transmitting a status confirmation message, via a second protocol different than the first protocol, to the selected target processor if the status message corresponding to the selected target processor is not received by the CCP;

determining whether the status confirmation message has been received by the target processor; and

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determining whether to release the allocated socket according to the determination of the receipt of the status confirmation message.

- 2. (Canceled)
- 3. (Currently Amended) The method of claim [[2]] 1, wherein the status confirmation message is transmitted to the selected target processor if the status message is not received from the selected target processor within a prescribed period of time.
- 4. (Original) The method of claim 3, wherein the prescribed period of time commences when the CCP sends a status request message to the selected target processor.
- 5. (Currently Amended) The method of claim [[2]] 1, further comprising: determining whether the selected target processor is in a down state according to a response to the status confirmation message; and

releasing the socket allocated to the selected target processor if the target processor is in a down state.

6. (Original) The method of claim 5, wherein the target processor is in a down state if no response is received to the status confirmation message.

7. (Currently Amended) The method of claim [[2]] 1, further comprising:

determining whether the corresponding selected target processor has an error according to a response to the status confirmation message; and

allocating a new socket rather than releasing the formerly allocated socket according to the result of the determination.

- 8. (Original) The method of claim 7, wherein the selected target processor is determined to have an error if a response to the status confirmation message is received.
- 9. (Currently Amended) The method of claim [[2]] 1, further comprising determining that the selected target processor is in a down state when the CCP receives no response to the status confirmation message and determining that the selected target processor has a socket error when the CCP receives a response to the status confirmation message.
- 10. (Original) The method of claim 9, wherein the socket allocated to the selected target processor is released if it is determined that the selected target processor is in the down state, and wherein the socket allocated to the selected target processor is re-allocated if it is determined that the selected target processor has the socket error.

- 11. (Currently Amended) The method of claim [[2]] 1, wherein the transmission of the status confirmation message is executed using first protocol comprises a Transmission Control Protocol (TCP) and the second protocol comprises a User Datagram Protocol (UDP).
- 12. (Currently Amended) The method of claim [[2]] 1, wherein releasing the socket allocation further comprises [[0f]] transmitting a status change message generated on the basis of the status message to the selected target processor when the status message is received.
- 13. (Original) The method of claim 1, wherein the reception state is one of received and not received.
- 14. (Currently Amended) A method for managing a socket in a mobile communication system, comprising:

communicating, via a first protocol, with each of a plurality of target processors using a socket allocated to each of the plurality of target processors;

transmitting, via a second protocol different than the first protocol, a status confirmation message to prescribed ones of the plurality of target processors based on a reception state of a corresponding status message; and

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performing socket management based on a response to the status confirmation message.

- 15. (Original) The method of claim 14, wherein the reception state of the corresponding status message is one of received and not received.
- 16. (Original) The method of claim 14, wherein the status confirmation message is transmitted to the prescribed ones of target processors if the corresponding status message is not received from the prescribed ones of the target processors within a prescribed period of time.
- 17. (Original) The method of claim 16, wherein the prescribed period of time commences when a status request message is sent to the selected target processor.
- 18. (Original) The method of claim 14, wherein the socket allocated to the prescribed target processors is withdrawn and a new socket is allocated when a response to the status confirmation message is received.

- 19. (Original) The method of claim 18, wherein the socket allocated to the prescribed target processor is released when a response to the status confirmation message is not received.
- 20. (Currently Amended) The method of claim 14, wherein the status confirmation message is executed using first protocol comprises a Transmission Control Protocol (TCP) and the second protocol comprises a User Datagram Protocol (UDP).
- 21. (Currently Amended) A method of managing a socket in a mobile communication system, comprising:

allocating a socket between a call control processor (CCP) and each of a plurality of target processors;

sending, via a first protocol, a request status message from the CCP to each of the target processors using the corresponding socket;

sending, via a second protocol different than the first protocol, a status confirmation message from the CCP to non-responding target processors; and

one of reallocating the socket to the non-responding processors and releasing the socket to the non responding processor.

- 22. (Original) The method of claim 21, wherein the status confirmation message is sent to target processors that fail to send a status message to the CCP in response to the status request message within a prescribed period of time.
- 23. (Original) The method of claim 21, wherein a new socket is allocated to a non responding target processor if the non responding target processor responds to the status confirmation message.
- 24. (Original) The method of claim 21, wherein the socket to the non responding target processor is released if the target processor fails to respond to the status confirmation message.
- 25. (Currently Amended) The method of claim 21, wherein the status confirmation message is transmitted to non responding target processors in accordance with first protocol comprises a Transmission Control Protocol (TCP) and the second protocol comprises a user Datagram protocol (UDP).